HAAS 1

HAAS CNC vertical machine #1

Memo

MACHINE AS PER FOLIO FA869 AND DWG

FOLIO REV: A(5) DWG REV:

DEBURR

NCR:	Yes	1	No
NCK:	res	/	INO

Date:

DQA:

NCR:	/es	/ No				WORK ORDER NON-	COL	NFORN	/IANCE / UP	DATE			
											QA Closed:	Date:	
Nork Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part N	•					Rework Scrap	Scrap Machining Small Fa					Water Jet d. Eng. Coor.	Engineering Quality
NCR I	No.					Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier	Other
Root					Descr	iption of work order update	Ti	nitial	Ac	ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
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		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete	/Unclear	Part Lost/M	ssing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea	it			Countersink		Mislabe	led		Positioned V	Vrong	
		Inspection	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset					
		Torque W	aves in E	xtrusio	n T	Drawing	Out of Calibration						
		Turning S	equence			Finish		Out of 9	Sequence				
		Wave/Tw	ist in Tub	oe .		Folio		Outside	Dimensions				

Work Orde February-21-13				*976	364	L*							Page 2
Item ID: Revision ID:	D4016-1		,	Accept	*	1900	040	100)*	Setup	Start Stop	*NS	S1*
Item Name: Start Date: Required Date: Reference:	Hinge Half, E 2/21/13 3/06/13	Start Qty: 24.00 Req'd Qty: 24.00	*24* *24*			Cust Item II Customer:	D:				ж	^N:	S2*
Approvals:		an:	Date:	Tooling: SPC (Y/N):			te:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center II 120 *170* QC Quality Control	D	Operation Description QC2- Inspect parts off ma	achine FAI/FAIB	Set Up/ Run Hours 0.00		Tool ID	Tool #	Plan Code	Accep Qty	ot Re Qt	•	Reject Number	Insp. Stamp DAS 25/3/3-4
130 *130* QC Quality Control		QC8- Inspect parts - seco	nd check	0.00	F.K.	13/ <i>0</i> 3/0	54		24	,	9		
160 *160* Packaging		Identify as per dwg & Sto	ock Location:	0.00					2	(x_			\$

Packaging

Date:

DQA:

NCR: Y	'es	/ No				WORK ORDER NON-	CON	NFORM	//ANCE / UP	DATE			
		•									QA Closed:	Date:	
Nork Orde	er:					DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
	-					Rework	7		Skid-tube	Crosstube		Water Jet	Engineering
Part N	۱o.					Scrap	Machining Small Fa			Small Fab	Prod	d. Eng. Coor.	Quality
						Use-as-is	↓ 		noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	۱o.					Work Order Update			Large Fab	Composite		Supplier]
Root					Descr	iption of work order update	Ī	nitial	Ac	ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
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	┝─┤	Bending			_	Bend	-	1			Over/Under	talaransa	Temperature/Cure
	-	Centre No	ot Concei	itric to	^{0/5} -	BOM/Route Broken/Damaged	-	Hardwa	on Incomplete	 - -	Part Incorred	<u> </u>	Weld
	\vdash	Crushed /	Crimnad			Burrs	\vdash	1 '	ions Incomplete	/Unclear	Part Lost/Mi	 	Wrong Stock Pulled
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	\vdash				-	Countersink	-	Maintenance Mislabeled			Positioned V	Vrong	
		Heat Trea		Tubo	-	Cut Too Short	-	Misread			Power Loss/		Other
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	\vdash	Turning S			"	Finish	Out of Sequence						
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	1	vvave/ tW	rist iii Tül	JC		יון טווט	1	Louiside	. •				

Work Ordo			*97664*									Page 3	
Item ID: Revision ID: Item Name:	D4016-1 Hinge Half,	Base		Accept	*N900	040	100)*	Setup	Start Stop	1/1	S1* S2*	
Start Date: Required Date: Reference:	2/21/13	Start Qty: 24.00 Req'd Qty: 24.00	*24* *24*		Cust Item I Customer:	D:					IV	3 /	
Approvals:	Process I	Plan:	Date:	Tooling: SPC (Y/N):		nte: nte:		-]	Run	Start Stop	171	R1* R2*	
Sequence ID/ Work Center II 170 *170* QC Quality Control	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Re Qt		Reject Number	Insp. Stamp	

13-3-4

											DQ	A:	Date:	
NCR: Y	⁄es	/ No				WORK ORDER NON-C	O	NFORM	MANCE / UP	DATE	QA Close	q. 	Date:	
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Work Orde	er: _						,				7			ı ——
Part N	-					Rework Scrap Use-as-is Work Order Update	Scrap Machining Small Fab e-as-is Thermoforming Finishing Rec/					Water J rod. Eng. Cod tore/Packagi Suppl	or. ng	Engineering Quality Other
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Cause		Date	Step	Qty	Ċ	or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verifica	tion	QC Inspector
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	-	Cracks			<u> </u>	Broken/Damaged	\vdash	-1	on Incomplete	⊢	Part Inco		-	Weld
	-	Crushed/	Crimped.			Burrs	\vdash	-{	ions Incomplete/	Unclear	Part Lost	•		Wrong Stock Pulled
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i :	1 1	Ripples in	Bend			Drill Holes	1	Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Date:

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

February-21-13 12:39:36 PM

Work Order ID:

97664

Parent Item:

D4016-1

Parent Item Name:

Hinge Half, Base

Start Date: 2/21/13

Required Date: 3/06/13

Start Qty: 24.00

Required Qty: 24.00

Comments:

IPP REV:A NEW ISSUE 09-11-27 JLM VERIFIED BY :DD IPP Rev:B as per dwg REV.A DD 10.02.22 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B1.000X1.000		Purchased	No			100	f	5.3400	0.08	1.92			
304 bar 1.00 x 1.00				<u>Location</u>		Loc Qty	<u>Lo</u>	c Code	*	ar	13	7-0-3	- O Z
•				MAT049		5.34 5.34			<u> </u>	2.0			

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Work Orde	r:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Work Orac	-					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part N	lo.					Scrap	1	i e	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	•					Use-as-is		Thermoforming Finishin			Rec/Sto	re/Packaging	Other
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Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
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	-	Centre No	ot Concer	ntric to	^{0/s} -	BOM/Route	\vdash	Hardwa		-	Part Incorre	.	Weld
	\vdash	Cracks	~ · ·		-	Broken/Damaged	\vdash	-	ion Incomplete	/Unaless		1	Wrong Stock Pulled
	-	Crushed/	urimped.			Burrs	-	Mainte	tions Incomplete	/ Officieal	Part Lost/M		vviolig stock rulled
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	-	Heat Trea		Tuba	<u> </u>	Cut Too Short	\vdash	Misrea		-	Power Loss		Other
		Inspection	-	oauı	-	Drill Holes	\vdash	Offset	u	L	rower Loss	/ Juige	Jouren
	\vdash	Ripples in		:vteue!=	<u> </u>	;	-	4	Calibration				
	\vdash	Torque W			" ⊢	Drawing	\vdash	- 1					
	$\vdash\vdash$	Turning S				Finish	Out of Sequence						
L		Wave/Tw	ist in Tub	e e		Folio	1	Outside Dimensions					

DART AEROSPACE LTD	Work Order:	97664
Description: Hinge Half, Base	Part Number:	D4016-1
Inspection Dwg: D4016 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.875	+/-0.010	.843			vern 51-10	
0.25	+/-0.030	240				
0.38	+0.030/-0.000	.388	//			
R0.03	+/-0.030	.032				
0.13	+/-0.030	-125				
0.88	+/-0.030	875	1,			
Ø0.257	+0.006/-0.001	254				
R0.38	+/-0.030	315	//			
0.500	+/-0.030	-500	1//			
0.75	+/-0.030	150				
, — — — — — — — — — — — — — — — — — — —						

Measured by:	Audited by:	Preliminary Approval:
Date: 3-3-3	Date: 13/03/04	Date:
Poy Data Change	777	Revised ha Approved

 $SIK_{\mathcal{A}} = \{a,b\}$

K Pato

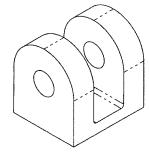
ENGINEERING.

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Without office

WORK CREER NO 97664 MW

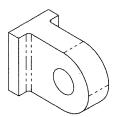
13-02-26



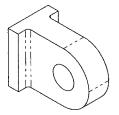
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С

D4016-1 HINGE HALF, BASE



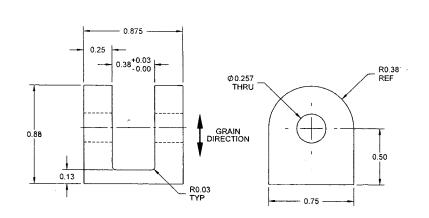
D4016-3 HINGE HALF, LID



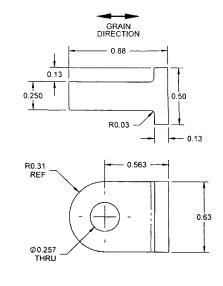
D4016-5 HINGE HALF, LIGHT LID

RELEASED 2010 -02- 16

Α	NEW ISS	NEW ISSUE JPH			10.01.29
REV.		DESCRIPTION BY			DATE
DESIG	N	AJS	DART AEROSPACE LTD		
DRAWN		AJS	HAWKESBURY, ONTARIO, CANADA		
CHECKED		9	DRAWING NO.		REV. A
MFG. APPR.		D	D4016		SHEET 1 OF 2
APPROVED		140.	TITLE		SCALE
DE APPR.		-4	BASKET HINGE		NTS
DATE	10.0	1.29	COPYRIGHT © 2016 BY DART AEROSPACE LTD has document a private who compare that, who is destructed on the European concentrion than it is not to 85 utility for any purpose of compared on concentration to with other persons which the private properties and the properties of concentration of the private persons and provided up to the properties of the private persons are provided to the provided up to the provided that the provided provided the provided that t		



D4016-1 HINGE HALF, BASE



D4016-3 HINGE HALF, LID D4016-5 HINGE HALF, LIGHT LID

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS			
CHECKED	0	DRAWING NO.	REV. A	
MFG. APPR.		D4016	SHEET 2 OF 2	
APPROVED	10	TITLE	SCALE	
DE APPR.	-#	BASKET HINGE	NTS	
DATE 10.0	1.29	THIS DOCUMENT BY PRIVATE AND CONTRIBETION ON SUBJECT ON THIS EXPRESS CONCINON THAT IT IS NOT TO BE USED FOR ANY PARROSS OR COMED ON COMMANDATION ON YOURSE PERSON WITHOUT MATTER MERISSIAN FROM DAIL ARROSPACE LTD.		

NOTES: 1) MATERIAL -1 & -3: 304/316 STAINLESS STEEL BAR, PER ASTM A276 REF DART SPEC M304B

-5: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR, PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS4117/4128/4115/4116) OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221 REF DART SPEC M6061T6B

D

REF DART SPEC M6061T6B

2) FINISH: NONE
3) TOTERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT -1: 0.09 lbs

-3: 0.04 lbs -5: 0.01 lbs